

Application No. 09/432,927
Amendment dated October 13, 2003
Reply to Office Action of July 17, 2003

REMARKS/ARGUMENTS

Claims 1-10 are pending in the application; the status of the claims is as follows:

Claims 1, 4, 9, and 10 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,456,335B1 to Miura et al (“Miura”).

Claims 2, 3, and 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The acknowledgement, in the Office Action, of a claim for foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received, is noted with appreciation.

The indication, in the Notice of Draftsperson’s Patent Drawing Review, that the Official Draftsperson has no objections to the drawings, is noted with appreciation.

Claims 2, 3, and 5-8 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 2 and 3 depend from independent claim 1. Claims 5-8 depend from independent claim 4. For the reasons presented in detail below, claims 1 and 4 are considered to be allowable. Thus, claims 2, 3, and 5-8 have not been rewritten in independent form.

Accordingly, it is respectfully requested that the objection to claims 2, 3, and 5-8 be reconsidered and withdrawn.

By this amendment, claims 4 and 9 have been amended to change “portion” to “fragment.” This change is intended to make clear that when the claim had previously stated a “portion of the image data” what had been intended to be referred to was less than 100% of the image data (this intention is apparent from the specification). Thus, the claims now read “a fragment of image data” which plainly describes less than all of the

Application No. 09/432,927
Amendment dated October 13, 2003
Reply to Office Action of July 17, 2003

image data. This amendment also adds new claims 11-13 to provide a more adequate basis of protection for the current invention.

35 U.S.C. § 102(e) Rejection

The rejection of claims 1, 4, 9, and 10 under 35 U.S.C. § 102(e) as being anticipated by Miura, is respectfully traversed based on the following.

Claim 1 recites, in part:

synchronous type processing means for carrying out a first image process on image data that is the subject of processing;

asynchronous type processing means for carrying out a second image process on image data of a predetermined region of said image data that is the subject of processing; and

synthesize means for synthesizing an output of said synchronous type processing means and an output of said asynchronous type processing means to form one image data.

Thus, according to claim 1 two processing means are claimed each of which is for "image processing." A first processing means is for synchronous-type processing; a second processing means is for asynchronous-type processing. As explained in the present specification:

The image processing apparatus can be formed of a synchronous type or an asynchronous type circuit. A hardware circuit such as the ASIC (application specific integrated circuit) is exemplary of the synchronous type circuit. A circuit that carries out a process with software formed of a MPU (microprocessor) and the like is exemplary of the asynchronous type circuit. (Emphasis Added.)

Specification, page 1, lines 15-20.

Thus, while a hardware circuit such as an ASIC is a synchronous type circuit, a processor which operates according to software code is an asynchronous type circuit. The present specification teaches that while synchronous type image processing circuits and

Application No. 09/432,927
Amendment dated October 13, 2003
Reply to Office Action of July 17, 2003

asynchronous type image processing circuits each have pluses and minuses, a system which combines both types provides special advantages.

As will be explained in the following, Miura utterly fails to disclose a synchronous type image processor, much less one used in tandem with an asynchronous type image processor. Miura discloses (see, e.g., Figs. 1 and 3 and accompanying text) a system which receives four video signals and combines these four video signals into a single signal. Miura states:

[V]ideo signals #1, #2, #3 and #4 which are output from the television cameras 201 by picking up the corresponding objects to be monitored are synchronized, and the multiple picture composing apparatus 202 composes the video signals #1 through #4 based on the synchronizing signals to input a composed video signal to the transmission unit 203.

Miura, col. 1, lines 40-46.

Thus, while the four TV signals are "synchronous" signals, and these signals are received, synchronized and combined in "multiple picture composing apparatus 202," that does not make "multiple picture composing apparatus 202" a synchronous-type image processing device as suggested in the office action. The term "synchronous-type" refers to the type of processing device, not the nature of the signals which are processed or the fact that the process may synchronize the signals.

As Miura fails to disclose a synchronous type image processor, much less one used in tandem with an asynchronous type image processor, Miura is unable to anticipate claim 1.

Miura also fails to anticipate claim 1 as the transmission unit 203 and network 204 are not equivalent to the claimed synthesizing means. In fact, "multiple picture composing apparatus 202" combines all four pictures, not the transmission unit 203 and network 204. The transmission unit and network merely transmit the 4-way picture.

Claim 4 recites an image processing system comprising:

- a first image processor formed of a hardware circuit, and carrying out a first image process on input image data;
- a second image processor carrying out a second image process on a fragment of said input image data according to a program of predetermined software; and
- a memory in which image data subjected to said first image process and image data subjected to said second image process are synthesized and stored.

Thus, as seen above, claim 4 requires a system with a first image processor for processing a set of image data and a second processor which processes only a fragment (i.e., less than all) of the image data.

Miura does not disclose or suggest that a second image processor carry out a second image process on a fragment of said input image data. Instead, whatever image process (or processes) are performed on the four video signals, these processes are uniformly performed on all of the image data. That is, Miura does not disclose a system which performs a first process on all of the data and a second process on only part of the data.

Because Miura does not disclose a system with a first image processor for processing a set of image data and a second processor which processes only a fragment (i.e., less than all) of the image data, Miura cannot anticipate claim 4.

Claim 9 recites an image processing method comprising the steps of:

- carrying out a first image process on input image data through a hardware circuit;
- carrying out a second image process on a fragment of the input image data through software; and
- synthesizing image data subjected to the first image process with image data subjected to the second image process,

Application No. 09/432,927
Amendment dated October 13, 2003
Reply to Office Action of July 17, 2003

Thus, as seen above, claim 9 requires a first image processing step on a set of image data and a second image processing step which processes only a fragment (i.e., less than all) of the image data.

Miura does not disclose or suggest that a second image processor carry out a second image process on a fragment of said input image data. Instead, whatever image process (or processes) are performed on the four video signals by Miura, these processes are uniformly performed on all of the image data. That is, Miura does not disclose a system or method which performs a first process on all of the data and a second process on only part of the data.

Because Miura does not disclose a method comprising a first image processing step which is performed on a set of image data and a second image processing step which is performed on only a fragment (i.e., less than all) of the image data, Miura cannot anticipate claim 9.

Because claim 10 depends from unanticipated independent claim 9 and incorporates and further limits the limitations of claim 9, claim 10 is also not anticipated by Miura.

Accordingly, it is respectfully requested that the rejection of claims 1, 4, 9, and 10 under 35 U.S.C. § 102(e) as being anticipated by Miura, be reconsidered and withdrawn.

This amendment adds new claims 11-13. Claim 11 requires both a synchronous-type data processing device and an asynchronous-type data processor. As discussed above, Miura fails to disclose a synchronous type image processor, much less one used in tandem with an asynchronous type image processor.

Application No. 09/432,927
Amendment dated October 13, 2003
Reply to Office Action of July 17, 2003

CONCLUSION

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration allowance is respectfully requested.

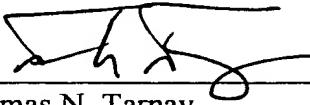
This Amendment increases the number of independent claims by 1 from 3 to 4, does not increase the total number of claims beyond twenty, and does not present any multiple dependency claims. Accordingly, a Response Transmittal and Fee Authorization form authorizing the amount of \$86.00 to be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed. Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not

Application No. 09/432,927
Amendment dated October 13, 2003
Reply to Office Action of July 17, 2003

submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: 

Thomas N. Tarnay
Registration No. 41,341
Attorney for Applicant

TNT/lb:bar:jk:bar
SIDLEY AUSTIN BROWN & WOOD LLP
717 N. Harwood, Suite 3400
Dallas, Texas 75201
Direct: (214) 981-3388
Main: (214) 981-3300
Facsimile: (214) 981-3400
October 13, 2003

DAI 269637v7